

**REMARKS**

This Amendment and Response to Final Office Action is being submitted in response to the final Office Action mailed July 11, 2007. Claims 1-35 are pending in the Application.

**Claims 1-14 and 28 are allowed.**

Claims 15-27 and 29-31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cardwell *et al.* (U.S. Pat. Pub. No. 2002/0036988) in view of Beine *et al.* (U.S. Pat. No. 6,304,347) and Ramamurthy *et al.* ("Optimizing Amplifier Placements in a Multiwavelength Optical LAN/MAN: The Unequally Powered Wavelengths Case," IEEE/ACM Transactions on Networking, Vol. 6, No. 6, December 1998, pp. 755-767).

Claims 32 and 34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cardwell *et al.* in view of Beine *et al.*

Claim 35 is rejected under 35 U.S.C. §103(a) as being unpatentable over Cardwell *et al.* in view of Beine *et al.*, as applied to Claim 32 above, and further in view of Ramamurthy *et al.*

In response to these rejections, Claims 15, 29, and 32 have been amended and Claim 35 has been canceled to further clarify the subject matter which Applicant regards as the invention, without prejudice or disclaimer to continued examination on the merits. These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added. Based upon the amendments, reconsideration of the Application is respectfully requested, without further search, in view of the following remarks.

**Claims 15-27 and 29-31 – Rejection - §103(a) – Cardwell *et al.*, Beine *et al.*, and Ramamurthy *et al.*:**

Claims 15-27 and 29-31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cardwell *et al.* (U.S. Pat. Pub. No. 2002/0036988) in view of Beine *et al.* (U.S. Pat. No. 6,304,347) and Ramamurthy *et al.* (“Optimizing Amplifier Placements in a Multiwavelength Optical LAN/MAN: The Unequally Powered Wavelengths Case,” IEEE/ACM Transactions on Networking, Vol. 6, No. 6, December 1998, pp. 755-767).

In response to this rejection, Applicant has incorporated the novel limitations of allowed independent Claims 1, 8, and 28 into independent Claims 15 and 29.

Specifically, Applicant has amended the last step in Claim 15 to recite:

selecting ***a subsequent set of*** optical amplifier placement configurations having a minimum number of optical amplifiers and a desired quality of service, ***wherein the subsequent set of optical amplifier placement configurations are consistent with and constrained by the initial set of optical amplifier placement configurations, and wherein constrained by the initial placement of amplifiers comprises one of analyzing all possible configurations of amplifiers having the same number of amplifiers as the initial placement and varying losses of the spans and nodes from the initial placement by a predetermined percentage to identify other possible configurations.***

With regard to independent Claim 29, Applicant has added two limitations as follows:

***wherein the selecting a subset of amplifier placement configurations comprises selecting an initial placement of amplifier configurations and selecting a subsequent set of optical amplifier placement configurations in accord with and constrained by the initial placement of amplifier configurations; and***

***wherein constrained by the initial placement of amplifier configurations comprises one of analyzing all possible configurations having the same number of amplifiers as the initial placement and varying losses of the spans and nodes from the initial placement by a predetermined percentage to identify other possible configurations.***

Claims 16-27 and 29-31 are dependent claims depending from independent Claims 15 and 28 or from intervening dependent claims. Therefore, Applicant respectfully submits that the rejection of Claims 15-27 and 29-31 under §103(a) as being unpatentable over Cardwell *et al.* in view of Beine *et al.* and Ramamurthy *et al.* has now been overcome and respectfully requests that this rejection be withdrawn.

**Claims 32 and 34 - Rejection - §103(a) – Cardwell *et al.* and Beine *et al.*:**

Claims 32 and 34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cardwell *et al.* in view of Beine *et al.*

In response to this rejection, Applicant has amended independent Claim 32 to include all of the elements and limitations of allowed independent Claim 28. Therefore, Applicant respectfully submits that the rejection of Claims 32 and 34 under §103(a) as being unpatentable over Cardwell *et al.* in view of Beine *et al.* has now been overcome and respectfully requests that this rejection be withdrawn.

**Claims 35 - Rejection - §103(a) – Cardwell *et al.*, Beine *et al.*, and Ramamurthy *et al.*:**

Claim 35 is rejected under 35 U.S.C. §103(a) as being unpatentable over Cardwell *et al.* in view of Beine *et al.*, as applied to Claim 32 above, and further in view of Ramamurthy *et al.* Applicant has canceled Claim 35, and respectfully requests withdrawal of this rejection.

**CONCLUSION**

Applicant would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,

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